Vandermonde

1) Given a table of (x,y) points, ask the user to input the x values in order and assign them to vector X. Next ask the user to input the y values associated with x in order and we assign them to vector b.

2) We create a "degree" variable and we set it equal to the length of the vector x.

3) We create a vector a_i and the squared matrix A and they will have the same length as the "degree" . This will be the vector of the coefficients of the polynomial we are looking to solve for.

4) Make a cycle:

    a) For i $= 0 <$ degree, i++

    b) Building the vector a_i to know the coefficients of the polynomial as such:

        (i) $a_i[i] =$ "a_" +(i+1)

    c) Make another cycle:

        (i) j $= 0$; j $<$ degree; j++

        (ii) Create the matrix vandermonde $A[i][j] = x[i]^{-(j+1)}$

5) Now we show the user the results obtained from A, a_i, and b. And we solve using whichever method is required for a system of equations.